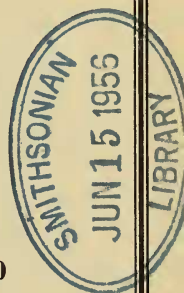


Ref

# OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

*Edited by*

**FRANCIS HEMMING, C.M.G., C.B.E.**  
Secretary to the Commission



**VOLUME 1. SECTION C. Part C.22. Pp. 329—340**

## **DIRECTION 33**

Addition to the *Official List of Generic Names in Zoology*  
of the generic name *Pleuronectes* Linnaeus, 1758 (Class  
Actinopterygii) (*Direction* supplementary to *Opinion* 68)

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# INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

## COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN DIRECTION 33

### A. The Officers of the Commission

*Honorary Life President* : Dr. Karl Jordan (*British Museum (Natural History), Zoological Museum, Tring, Herts, England*)

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*President* : Professor James Chester Bradley (*Cornell University, Ithaca, N.Y., U.S.A.*) (12th August 1953)

*Vice-President* : Senhor Dr. Afranio do Amaral (*Sao Paulo, Brazil*) (12th August 1953)

*Secretary* : Mr. Francis Hemming (*London, England*) (27th July 1948)

### B. The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) (1st January 1947)

Senor Dr. Angel Cabrera (*La Plata, Argentina*) (27th July 1948)

Mr. Francis Hemming (*London, England*) (27th July 1948) (*Secretary*)

Dr. Henning Lemche (*Universitetets Zoologiske Museum, Copenhagen, Denmark*) (27th July 1948)

Professor Teiso Esaki (*Kyushu University, Fukuoka, Japan*) (17th April 1950)

Professor Pierre Bonnet (*Université de Toulouse, France*) (9th June 1950)

Mr. Norman Denbigh Riley (*British Museum (Natural History), London*) (9th June 1950)

Professor Tadeusz Jaczewski (*Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland*) (15th June 1950)

Professor Robert Mertens (*Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a. M., Germany*) (5th July 1950)

Professor Erich Martin Hering (*Zoologisches Museum der Humboldt-Universität zu Berlin, Germany*) (5th July 1950)

Senhor Dr. Afranio do Amaral (*S. Paulo, Brazil*) (12th August 1953) (*Vice-President*)

Professor J. R. Dymond (*University of Toronto, Toronto, Canada*) (12th August 1953)

Professor J. Chester Bradley (*Cornell University, Ithaca, N.Y., U.S.A.*) (12th August 1953) (*President*)

Professor Harold E. Vokes (*Johns Hopkins University, Baltimore, Maryland, U.S.A.*) (12th August 1953)

Professor Béla Hankó (*Mezőgazdasági Múzeum, Budapest, Hungary*) (12th August 1953)

Dr. Norman R. Stoll (*Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.*) (12th August 1953)

Mr. P. C. Sylvester-Bradley (*Sheffield University, Sheffield, England*) (12th August 1953)

Dr. L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) (12th August 1953)

Dr. K. H. L. Key (*Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia*) (15th October 1954)

Dr. Alden H. Miller (*Museum of Vertebrate Zoology, University of California, Berkeley, California, U.S.A.*) (29th October 1954)

Doc. Dr. Ferdinand Prantl (*Národní Museum v Praze, Prague, Czechoslovakia*) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (*Zoologisches Institut der Universität, Vienna, Austria*) (6th November 1954)

Professor F. S. Bodenheimer (*The Hebrew University, Jerusalem, Israel*) (11th November 1954)

Professor Ernst Mayr (*Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.*) (4th December 1954)

Professor Enrico Tortonese (*Museo di Storia Naturale "G. Doria," Genova, Italy*) (16th December 1954)

## DIRECTION 33

ADDITION TO THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY" OF THE GENERIC NAME "PLEURONECTES" LINNAEUS, 1758 (CLASS ACTINOPTERYGII) ("DIRECTION" SUPPLEMENTARY TO "OPINION" 68)

**RULING :—**(1) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with the Name No. 1010 : *Pleuronectes* Linnaeus, 1758 (gender : masculine) (type species, by selection by Bleeker (P.) (1862) : *Pleuronectes platessa* Linnaeus, 1758).

(2) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* with the Name No. 758 : *platessa* Linnaeus, 1758, as published in the combination *Pleuronectes platessa* (specific name of type species of *Pleuronectes* Linnaeus, 1758).

(3) The under-mentioned generic name is hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name No. 452 : *Platessa* Cuvier (G.L.C.F.D.), 1817 (a junior objective synonym of *Pleuronectes* Linnaeus, 1758).

(4) The under-mentioned family-group name is hereby placed on the *Official List of Family-Group Names in Zoology* with the Name No. 70 : PLEURONECTIDAE (correction of PLEURONECTIA) Rafinesque, 1815 (type genus : *Pleuronectes* Linnaeus, 1758) (family-group name first published in correct form as PLEURONECTIDAE by Bonaparte (C.L.J.L.), [1832]).

(5) The under-mentioned family-group names are hereby placed on the *Official Index of Rejected and Invalid*

*Family-Group Names in Zoology* with the Name Nos. 55 and 56 respectively :—

- (a) PLEURONECTIA Rafinesque, 1815 (type genus : *Pleuronectes* Linnaeus, 1758) (an Invalid Original Spelling for PLEURONECTIDAE) ;
- (b) PLEURONECTIDES Risso, 1826 (type genus : *Pleuronectes* Linnaeus, 1758) (an Invalid Original Spelling for PLEURONECTIDAE).

# I.—THE SUBJECT MATTER OF THE PRESENT “ DIRECTION ”

The question dealt with in the present *Direction* was brought before the International Commission on Zoological Nomenclature in the following Report submitted by the Secretary on 1st September 1955 :—

**Report relating to the generic name “ *Pleuronectes* ” Linnaeus, 1758  
(Class Actinopterygii)**

By FRANCIS HEMMING, C.M.G., C.B.E.,  
*Secretary to the International Commission on Zoological Nomenclature*

The present Report relating to the generic name *Pleuronectes* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 268) is submitted to the International Commission on Zoological Nomenclature in response to a request addressed to myself, as Secretary, at the Session held by the Commission in Paris in 1948. The relevant issues are set out below.

**2. Action taken by the Commission in 1922 :** The question of the type species of this genus was referred to the Commission on some—now unascertainable—date early in the inter-war period by the late Dr. David Starr Jordan, who at the same time submitted a similar application regarding the species to be accepted as the type species of the genus *Sparus* Linnaeus, 1758. The decisions reached by the Commission in these two cases were embodied in *Opinion* 68 and *Opinion* 69 respectively. These *Opinions* were published in January

1922 (*Smithson. misc. Coll.* 73 (No. 1) : 1—8 (*Pleuronectes*), 9—12 (*Sparus*)). Each of these *Opinions* was given the title “The Type Species of . . .” the genus concerned, but neither of these *Opinions* gave a Ruling on this subject. In each case the Ruling given was limited to the negative statement that “Fleming, 1828 . . . does not designate the type of” *Pleuronectes* in the first case, *Sparus* in the second case.

**3. Action taken by the Commission in 1948 :** At its Session held in Paris in 1948 the Commission reviewed a number of its older *Opinions* and gave instructions as regards the further action which it considered to be necessary in order to complete or clarify the Rulings given in the *Opinions* concerned. The decisions then taken in regard to *Opinions* 68 and 69 were recorded jointly as follows (1950, *Bull. zool. Nomencl.* 4 : 337) :—

THE COMMISSION agreed :—

(2) as regards *Opinion* 68 (“The Type Species of *Pleuronectes* Linnaeus, 1758”) and *Opinion* 69 (“The Type Species of *Sparus* Linnaeus, 1758”) :—

- (a) that the incomplete and unhelpful decisions given in the foregoing *Opinions* should be supplemented as soon as possible by *Opinions* specifying the type species of the genera concerned and placing the generic and trivial names concerned on the relevant *Official Lists* ;
- (b) that the Secretary to the Commission be invited to confer with specialists for the purpose of submitting proposals to the Commission to give effect to the decision recorded in (a) above ;

**4. Consultations with specialists :** It was not possible to make any progress with this and other similar cases until after the publication in 1950 (in vol. 4 of the *Bulletin of Zoological Nomenclature*) of the Official Record of the Paris Session of the Commission. After myself making some preliminary investigations relating to the history of the name *Pleuronectes* Linnaeus, I prepared in 1951 a note on the issues involved in the present case, in which I concluded with an appeal to specialists to assist the Commission in reaching a decision. This note was published on 15th April 1952 (*Bull. zool. Nomencl.* 7 : 202—203), but it failed to elicit the whole of the information required. In addition, the Directive given to the Commission by the Fourteenth International Congress of Zoology, Copenhagen, 1953, when establishing the *Official List of Family-Group Names in Zoology*, made it necessary to investigate the family-group-names problem involved in the present case. Accordingly, I decided to address a direct appeal for



assistance to the following leading specialists: (1) Dr. Ethelwynn Trewavas (*British Museum (Natural History), London*); Dr. Leonard P. Schultz (*United States National Museum, Washington, D.C., U.S.A.*); (3) Professor Enrico Tortonese (*Istituto e Museo di Zoologia della Università di Torino, Italy*)<sup>1</sup>. The Commission is much indebted to them for the valuable help given.

**5. The type species of the genus "Pleuronectes" Linnaeus, 1758:** The nominal genus *Pleuronectes*, as established by Linnaeus in 1758, contained sixteen nominal species, but no type species was designated or indicated. The eighth of the species included in this genus was *Pleuronectes platessa* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 269). In this as in similar cases, it was many decades before the importance of the "type-species" concept was realised. In the mean time, however, various other nominal genera were established, the included species of which comprised one or more of the species which Linnaeus had placed in his genus *Pleuronectes*. In these circumstances, the lack of any international rules—and in consequence the absence of any authoritative guidance as to how the type species of genera were to be determined—led to necessarily inconclusive discussions as to the effect on the concept represented by the nominal genus *Pleuronectes* Linnaeus of the action taken by later authors such as Rafinesque (1810), Cuvier (1817), Fleming (1822) and others. As late as the end of the XIXth century there were three rival ideas as to how the type species of a genus ought to be determined. The first of these schools of thought argued that the proper way to determine the type species of a genus, for which no type species had been designated or indicated by the original author, was by an examination of the history of the generic name concerned to ascertain which of the originally included species had been removed to other genera and thus "eliminated" from consideration, the field of choice for a type species being thus restricted to those of the originally included species which had not been removed in this way. The second school of thought argued that the so-called "Law of Elimination" could not be relied upon to produce satisfactory results and itself gave rise to many difficulties of interpretation. According to this argument the only reliable means for determining the type species of a genus of the kind under consideration was to accept as the type species the first of the originally included species to be selected as such by a subsequent author. Some authors however rejected both these methods, claiming that the first of the species included in a genus by its original author should be accepted as the type species. Even the adoption of the present *Règles* at Berlin in 1901 failed to provide a definite answer to the question as to how the type species of a genus was to be determined, the Article (Article 30) then adopted on this subject being ambiguous in phraseology and bearing all the signs of a compromise formula designed to conceal unresolved

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<sup>1</sup> Now of the *Museo di Storia Naturale "G. Doria"*, Genova, Italy.

differences of opinion. It was not until 1907 that this old controversy was set at rest by the decision of the Seventh International Congress of Zoology at Boston, Massachusetts, to substitute for the unsatisfactory Article adopted by the Berlin Congress a revised Article 30 which contained a series of reasonably clear rules for determining the type species of nominal genera, the most important of these from the present point of view being Rule (g) which provided that, where a genus was established without a designated or indicated type species, the type species shall be the first of the originally included species subsequently to be selected as such. The adoption of this Rule, which governs the matter to this day, made it necessary to review the history of every nominal genus of the kind in question for the purpose of ascertaining which of the originally included species had first been selected, under Rule (g) in Article 30, to be the type species.

**6. History of the name "Pleuronectes" :** The history of the name *Pleuronectes* in the XIXth century provides many examples of attempts to secure a type species for the genus so named by the method of "elimination" but, as that method is not recognised in the *Règles*, it is not necessary to examine these early efforts in detail. Part of that history is set out in a statement included in the Commission's *Opinion* 68, which is of interest from this point of view, although (it must be noted) many of the speculations in that statement on the nomenclatorial effects of action by the authors cited are out of date and, so far as the present *Règles* are concerned, incorrect. The first point which does call for note is that it has sometimes been argued—though not in the statement referred to above—that the nominal species *Pleuronectes platessa* Linnaeus became the type species of *Pleuronectes* by selection by Swainson in 1839 (*Nat. Hist. Class. Fish. Amph. Rept.* 2 : 187, 302). Reference to Swainson shows, however, that, although he clearly considered that *P. platessa* Linnaeus typified the genus *Pleuronectes* and his action would have constituted a "restriction" of *Pleuronectes* to that species if the principles of restriction and elimination had been recognised in the *Règles*, that action does not constitute a selection "rigidly construed" of *P. platessa* as the type species of *Pleuronectes* within the meaning of Rule (g) in Article 30. It is necessary, therefore, to resume the search of the literature for the purpose of finding an author who did make an effective type selection for this genus. This turns out to have been Bleeker, 1862 (*Versl. Akad. Amsterdam* 13 : 427 (reprint : 6)) who definitely selected *P. platessa* Linnaeus to be the type species of this genus. This, being the first selection made, is the valid type selection for this genus. It was not immediately accepted as such, for as late as 1887 (*Ann. Rep. Comm. Fish. & Fisheries* 1886 : 255—256) Jordan & Goss, who were adherents of the principle of elimination, accepted *P. maximus* Linnaeus as the type species of *Pleuronectes*. Two years later Gill, who was also an eliminationist, rebutted the thesis advanced by Jordan & Goss, and by his own application of the principle of elimination, which involved the acceptance of the action by Swainson in 1839, arrived at

the conclusion that *P. platessa* Linnaeus was the type species of *Pleuronectes*. That this species is the type species was accepted by later workers and in particular by Jordan himself in 1917 in his *Genera of Fishes* ((1) : 13). It is so treated by all modern authors.

**7. A junior objective synonym of "Pleuronectes" Linnaeus, 1758 :** It should be noted that in the first major effort made to split up the genus *Pleuronectes* Linnaeus, Cuvier (G.L.C.F.D.) in 1817 (*Règne Anim.* 2 : 220) erected a nominal genus *Platessa* in which, without designating a type species, he placed *Pleuronectes platessa* Linnaeus and two other species, thus making *P. platessa* the type species by absolute tautonymy. The name *Platessa* Cuvier, 1817, is accordingly a junior objective synonym of *Pleuronectes* Linnaeus, 1758.

**8. Family-Group Name Problems :** The generic name *Pleuronectes* Linnaeus was taken as the base for a family-group name by Rafinesque in 1815 (*Analyse Nature* : 83), who published the name PLEURONECTIA. Nine years later Risso (1826, *Hist. nat. princip. Prod. Eur. mérid.* 3 : 245) published the name PLEURONECTIDES as the name for a family. This family name was first published in the correct form PLEURONECTIDAE by Bonaparte (C.L.J.L.) in [1832] (*Saggio Distrib. met. Anim. Vert.* : 96, 117).

**9. Recommendations now submitted :** In discharging the task entrusted to me in this matter, I recommend that in the light of the particulars given in the present Report the International Commission should complete the Ruling given in its *Opinion* 68 by :—

- (1) placing the under-mentioned generic name on the *Official List of Generic Names in Zoology* : *Pleuronectes* Linnaeus, 1758 (gender : masculine) (type species, by selection by Bleeker (1862) : *Pleuronectes platessa* Linnaeus, 1758) ;
- (2) placing the under-mentioned specific name on the *Official List of Specific Names in Zoology* : *platessa*. Linnaeus, 1758, as published in the combination *Pleuronectes platessa* (specific name of type species of *Pleuronectes* Linnaeus, 1758) ;
- (3) placing the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* : *Platessa* Cuvier, 1817 (a junior objective synonym of *Pleuronectes* Linnaeus, 1758) ;
- (4) placing the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology* : PLEURONECTIDAE (correction of PLEURONECTIA) Rafinesque, 1815 (type genus : *Pleuronectes* Linnaeus, 1758) (name first published in correct form as PLEURONECTIDAE by Bonaparte ([1832])) ;



- (5) placing on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* the under-mentioned family-group names, each of which is an Invalid Original Spelling for PLEURONECTIDAE : (a) PLEURONECTIA Rafinesque, 1815 ; (b) PLEURONECTIDES Risso, 1826.

**2. Registration of the present application :** Following the decision by the International Commission at its Session held in Paris in 1948 that arrangements should be made for the completion of the Ruling in regard to the generic name *Pleuronectes* Linnaeus, 1758, given in 1922 in *Opinion* 68, the problem so involved was allotted the Registered Number Z.N.(S.) 606.

## II.—THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

**3. Issue of Voting Paper V.P.(O.M.)(55)24 :** On 1st September 1955 a Voting Paper (V.P.(O.M.)(55)24) was issued in which each Member of the Commission was asked (1) to state whether he agreed that “ in conformity with the General Directive relating to the giving of Rulings on matters left unsettled in previously rendered *Opinions* issued to the Thirteenth International Congress of Zoology, Paris, 1948, and to the further Directives relating to the maintenance and development of the *Official Lists* and *Official Indexes* issued by the foregoing Congress and by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the entries on the said *Lists* and *Indexes* in regard to the generic name *Pleuronectes* and associated names recommended in paragraph 9 of the Report bearing the number Z.N.(S.) 606 submitted by the Secretary simultaneously with the present Voting Paper [i.e. in the paragraph numbered as above in the Report reproduced in the first paragraph of the present *Direction*] be made thereon as proposed ”, and (2), if he was of the opinion that any of the suggested entries was not in harmony with the General Directives referred to above, to indicate that entry.

**4. The Prescribed Voting Period :** As the foregoing Voting Paper was issued under the One-Month Rule, the Prescribed Voting Period closed on 1st October 1955.

**5. Particulars of the Voting on Voting Paper V.P.(O.M.)(55)24 :** At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(O.M.)(55)24 was as follows :—

(a) *Affirmative Votes had been given by the following twenty-five (25) Commissioners (arranged in the order in which Votes were received) :*

Bodenheimer ; Holthuis ; Lemche ; Hering ; Riley ;  
Mayr ; Vokes ; Miller ; Prantl ; Key ; Esaki ;  
Bradley (J.C.) ; Cabrera ; Stoll ; do Amaral ; Boschma ;  
Kühnelt ; Hemming ; Dymond ; Sylvester-Bradley ;  
Jaczewski ; Tortonese ; Mertens ; Bonnet ; Hankó ;

(b) *Negative Votes :*

None ;

(c) *Voting Papers not returned :*

None.

**6. Declaration of Result of Vote :** On 4th October 1955, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P. (O.M.)(55)24, signed a Certificate that the Votes cast were as set out in paragraph 5. above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

### 7. Preparation of the Ruling given in the present " Direction " :

On 14th December 1955 Mr. Hemming prepared the Ruling given in the present *Direction* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(O.M.)(55)24.

**8. Original References :** The following are the original references for the generic and specific names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Direction* :—

*Platessa* Cuvier (G.L.C.F.D.), 1817, *Règne Anim.* **2** : 220  
*platessa*, *Pleuronectes*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 269  
*Pleuronectes* Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 268

**9.** The following is the reference for the selection of a type species for the genus *Pleuronectes* Linnaeus, 1758, specified in the Ruling given in the present *Direction* : Bleeker (P.), 1862, *Versl. Akad. Amsterdam* **13** : 427 (reprint : 6).

**10.** The following are the original references for the family-group names specified in the Ruling given in the present *Direction* :—

PLEURONECTIA Rafinesque, 1815, *Analyse Nature* : 83  
 PLEURONECTIDAE Bonaparte (C.L.J.L.), [1832], *Saggio Distrib. met. Anim. Vert.* : 96, 117  
 PLEURONECTIDES Risso, 1826, *Hist. nat. princip. Product. Eur. mérid.* **3** : 245

**11.** The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Direction* is accordingly

hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

12. The present *Direction* shall be known as *Direction* Thirty-Three (33) of the International Commission on Zoological Nomenclature.

DONE in London, this Fourteenth day of December, Nineteen Hundred and Fifty-Five.

*Secretary to the International Commission  
on Zoological Nomenclature*

**FRANCIS HEMMING**